

Notice of Allowability

Application No.

10/029,319

Examiner

Davienne Monbleau

Applicant(s)

CYMER, I NC

Art Unit

2878

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the response filed on 2/9/04 and the included Examiner's Amendment.
2. ☒ The allowed claim(s) is/are 1-6 and 9-20.
3. ☒ The drawings filed on 17 October 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT AND STATEMENT OF REASONS FOR ALLOWANCE

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Bill Cray on 3/3/04.

The application has been amended as follows:

Claim 9: change "an apparatus as in Claim 7" to -- an apparatus as in Claim 1 --.

Claim 10: change "an apparatus as in Claim 7" to -- an apparatus as in Claim 9 --.

Response to Arguments

Applicant's arguments with respect to Claims 1-6 and 9-20, filed on 2/9/04, have been carefully considered and found persuasive.

Regarding Claim 1, Applicant argues in page 3 that the cited prior art of record (and in particular Hoffman et al. US 6,034,984) teaches in Figure 2 a helical structure and an alternative embodiment comprising reversed helical twists, wherein alternate blade members have opposite twists. This is not the same as a "double helix pattern" including "said acute angle being approximately equal and opposite to said acute angle of blade members in adjacent segments..."

Regarding Claim 20, Applicant argues in page 3 that the cited prior art of record (*Hoffman*) teaches that the blade members in adjacent sections are all spaced with a precise circumferential angular offset from section to section to approximately though not exactly in

Art Unit: 2878

helical alignment. Claim 20 requires that “blades in sequential ... segments of the same helix pattern [are] randomized to not be in helical alignment”.

Allowable Subject Matter

Claims 1-6 and 9-20 are allowed.

The following is an examiner’s statement of reasons for allowance:

Regarding Claims 1-6 and 9-19, the cited prior art of record does not teach or fairly suggest an electric discharge laser apparatus including a tangential fan comprising, along with all of the other claimed features, a plurality of blade members disposed in an approximate double helix pattern with the blade members in alternate segments being positioned approximately parallel to each other and at an acute angle with said rotation axis, said acute angle being approximately equal and opposite said acute angle of blade members in adjacent segments.

Regarding Claim 20, the cited prior art of record does not teach or fairly suggest an electric discharge laser apparatus including a tangential fan comprising, along with all of the other claimed features, a plurality of blade members, wherein said blade members being positioned in adjacent fan blade segments in a double helix pattern with the blades in sequential fan blade segments of the same helix pattern randomized to not be in helical alignment.

The advantages of these features are in the specification on pages 1-4. In particular, these blade member structures “minimize adverse effects of reflections of electric discharge generate shock waves back to the discharge region simultaneously with a subsequent discharge”.

(Specification page 3 last paragraph).

Conclusion

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davienne Monbleau whose telephone number is 571-272-1945. The examiner can normally be reached on Mon-Fri 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Davienne Monbleau
DNM


DAVID PORTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800